UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

050

7590

08/13/2009

LAHIVE & COCKFIELD, LLP FLOOR 30, SUITE 3000 ONE POST OFFICE SQUARE BOSTON, MA 02109

| EXAMINER | | | | | |
|-------------------------|--------------|--|--|--|--|
| CHUO, TONY SHENG HSIANG | | | | | |
| ART UNIT | PAPER NUMBER | | | | |

1795

DATE MAILED: 08/13/2009

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/795,952 | 03/08/2004 | Takashi Komura | TOW-066RCE2 | 1413 |

TITLE OF INVENTION: FUEL CELL WITHOUT Z-LIKE CONNECTION PLATES AND THE METHOD PRODUCING THE SAME.

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 11/13/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

| maintenance fee notifica | tions. | | | | | | correspondence address as rate "FEE ADDRESS" for r domestic mailings of the |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| CURRENT CORRESPOND | ENCE ADDRESS (Note: Use Bl | ock 1 for any change of address) | Feet | c) Transmittal Th | is certif | ficate cannot be used f | or any other accompanying or the or formal drawing, must |
| 959 | 7590 08/13 | /2009 | Marc | | | e of Mailing or Trans | |
| FLOOR 30, SUI ONE POST OFF | FICE SQUARE | | I hei State addr trans | eby certify that the | is Fee(| s) Transmittal is being | deposited with the United t class mail in an envelope above, or being facsimile ate indicated below. |
| BOSTON, MA | 02109 | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTC | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/795,952 | 03/08/2004 | - | Takashi Komura | | Γ | OW-066RCE2 | 1413 |
| TITLE OF INVENTION | : FUEL CELL WITHOU | JT Z-LIKE CONNECTION | ON PLATES AND THE M | ETHOD PRODU | CING | ΓΗΕ SAME. | |
| | | | | | | | |
| | | | I | | | Γ | T |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSU | E FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1510 | \$300 | \$0 I | \$1810 | | 11/13/2009 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | | | | |
| CHUO, TONY S | | 1795 | 429-032000 | | | | |
| 1. Change of corresponde CFR 1.363). | | • | 2. For printing on the p. (1) the names of up to | | | nevs 1 | |
| Change of corresp | ondence address (or Cha 3/122) attached. | nge of Correspondence | or agents OR, alternativ | ely, | | | |
| ☐ "Fee Address" ind | ication (or "Fee Address | " Indication form | (2) the name of a single registered attorney or a | gent) and the nam | ies of u | p to | |
| Number is required. | 2 or more recent) attach | ed. Use of a Customer | 2 registered patent attor listed, no name will be | | по пап | ne is 3 | |
| 3. ASSIGNEE NAME A | ND RESIDENCE DATA | A TO BE PRINTED ON | THE PATENT (print or typ | e) | | | |
| PLEASE NOTE: Unl | less an assignee is ident h in 37 CFR 3.11. Com | ified below, no assignee pletion of this form is NO | data will appear on the pa T a substitute for filing an | ntent. If an assign | ee is id | dentified below, the de | ocument has been filed for |
| (A) NAME OF ASSI | • | | (B) RESIDENCE: (CITY | · · | COUNT | TRY) | |
| | | | | | | | |
| Diago shook the ammount | ista sasiansa satarang sa | ontonomina (svill mot be sm | sinted on the notant). | Individual Dick | | ion on other univerte cue | oup entity 🖵 Government |
| Please check the appropr | tate assignee category or | categories (will not be pi | rinted on the patent): | Individual 🖵 Co | orporat | ion or other private gro | oup entity Government |
| 4a. The following fee(s) | are submitted: | 41 | Payment of Fee(s): (Plea A check is enclosed. | se first reapply a | ny prev | viously paid issue fee | shown above) |
| | No small entity discount p | permitted) | Payment by credit card. Form PTO-2038 is attached. | | | | |
| Advance Order - # of Copies | | | The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | |
| 5. Change in Entity Sta | tus (from status indicate | d above) | overpayment, to Depo | nt recount ivamo | | (chelose as | rextra copy or ans form). |
| a. Applicant claim | s SMALL ENTITY state | ıs. See 37 CFR 1.27. | ☐ b. Applicant is no long | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accepte tes Patent and Trademark | d from anyone other than the Office. | ne applicant; a regi | istered | attorney or agent; or th | e assignee or other party in |
| <u> </u> | | | | | | | |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | | Registration N | No | | |
| an application. Confiden submitting the completed this form and/or suggesti | tiality is governed by 35 d application form to the ions for reducing this but irginia 22313-1450. DC | U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th | 1.14. This collection is est depending upon the indiverse Chief Information Office | imated to take 12 : idual case. Any co r. U.S. Patent and | minute: ommen Trader | s to complete, including ts on the amount of tir mark Office, U.S. Depa | by the USPTO to process) g gathering, preparing, and ne you require to complete urtment of Commerce, P.O. For Patents, P.O. Box 1450, |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-----------------|----------------------|--------------------------------|------------------|
| 10/795,952 | 03/08/2004 | Takashi Komura | TOW-066RCE2 1413 | |
| 959 | 7590 08/13/2009 | | EXAM | IINER |
| LAHIVE & CO | CKFIELD, LLP | CHUO, TONY S | HENG HSIANG | |
| FLOOR 30, SUITE 3000 | | | ART UNIT | PAPER NUMBER |
| ONE POST OFFI BOSTON, MA 02 | | | 1795 DATE MAILED: 08/13/200 | 9 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 230 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 230 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| | Application No. | Applicant(s) | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------|
| | 10/795,952 | KOMURA ET AL. | |
| Notice of Allowability | Examiner | Art Unit | |
| | Tony Chuo | 1795 | |
| The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI | (OR REMAINS) CLOSED or other appropriate comr IGHTS. This application is | in this application. If not included nunication will be mailed in due course. | |
| 1. This communication is responsive to <u>Amendment after nor</u> | n-final rejection filed on 5/8 | <u>′09</u> . | |
| 2. ☑ The allowed claim(s) is/are <u>1-4,6,12 and 13</u> . | | | |
| 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). | been received. been received in Applicat | ion No | m the |
| * Certified copies not received: | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give | IENT of this application. itted. Note the attached Ex | (AMINER'S AMENDMENT or NOTICE | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | et he submitted | | |
| (a) ☐ including changes required by the Notice of Draftspers | | ew (PTO-948) attached | |
| 1) hereto or 2) to Paper No./Mail Date | | , | |
| (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | .84(c)) should be written on | the drawings in the front (not the back) o | of |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT | sit of BIOLOGICAL MA | TERIAL must be submitted. Note the |) |
| | | | |
| Attachment(s) | 5 Notice of | nformal Detaut Application | |
| Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) | | nformal Patent Application Summary (PTO-413), | |
| 3. ☐ Information Disclosure Statements (PTO/SB/08), | Paper No | ./Mail Date s Amendment/Comment | |
| Paper No./Mail Date4. Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. ⊠ Examiner 9. | s Statement of Reasons for Allowance | |
| | | | |

Application/Control Number: 10/795,952 Page 2

Art Unit: 1795

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the Specification:

a) please delete the space between the two paragraphs of the Abstract to form a single paragraph;

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

The Badding reference discloses fuel cell "200" comprising: an array of fuel cells wherein each electrochemical cell includes an anode "16", a cathode "12", and an electrolyte sheet "10" in between the anode and cathode; an interconnect "14" that is an electrical conductor that is disposed between a pair of adjacent fuel cells and is not stacked on either of the adjacent fuel cells wherein the interconnect is electrically connected to the cathode of one of the adjacent fuel cell and extending in parallel to the cathode and is also electrically connected to the anode of the other of the adjacent fuel cell and extending in parallel to the anode, and wherein a portion of the electrolyte of the pair of adjacent fuel cells is sandwiched between the interconnect (See paragraph [0030] and Figure 1B).

However, Badding et al does not expressly teach a film having windows that is laminated on the porous insulating film such that at least one of the first and second electrodes of the power generation units are disposed in the windows.

Page 3

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Chuo whose telephone number is (571)272-0717. The examiner can normally be reached on M-F, 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/795,952 Page 4

Art Unit: 1795

TC

/PATRICK RYAN/ Supervisory Patent Examiner, Art Unit 1795